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EXAMINER
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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* PETER W. WENZEL,  
PIERRE BOULOS and STEVEN J. CURRIN

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Appeal 2008-4781  
Application 09/981,268  
Technology Center 2600

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Decided: December 9, 2008

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Before KENNETH W. HAIRSTON, MAHSHID D. SAADAT,  
and KARL D. EASTHOM, *Administrative Patent Judges*.

EASTHOM, *Administrative Patent Judge*.

DECISION ON APPEAL

## STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134 from the Final Rejection of claims 1-23. (Br. 7).<sup>1</sup> No other claims are pending. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

Appellants' invention involves a registration system for cellular wireless mobile units. A mobile subscriber unit attempting to communicate with a service provider stores a plurality of IP (Internet Protocol) addresses corresponding to an assigned primary home agent and a plurality of secondary home agents. Upon an initial registration attempt, the subscriber unit attempts to register with its primary home agent. Should that attempt fail, the subscriber unit attempts registration with one of its assigned secondary home agents. (Spec. 1: 8-22; 3: 11-26; Abstract; Fig. 1). Claim 1, exemplary of the claims on appeal, follows:

1. A method for registering a subscriber unit with a home agent in a cellular system, the method comprising:

storing addresses for a plurality of home agents in the subscriber unit, wherein the plurality of home agents includes a primary home agent and a plurality of secondary home agents;

attempting registration with the primary home agent;

failing to achieve registration with the primary home agent;

the subscriber unit selecting a secondary home agent from the plurality of secondary home agents in an attempt to balance load among the plurality of secondary home agents; and

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<sup>1</sup> Appeal Brief (filed, August 22, 2007).

attempting registration with the secondary home agent.

The Examiner relies on the following prior art references to show unpatentability:

Fehnel	US 5,590,092	Dec. 31, 1996
Troxel	US 2002/0078238 A1	Jun. 20, 2002
Ton	US 2002/0067704 A1	Jun. 6, 2002
Tiedemann	US 6,615,050 B1	Sept. 2, 2003

C. Perkins, *IP Mobility Support*, Network Working Group - Request for Comments: 2002, XP-002222715, pp. 1-79, October 1996 (*hereinafter* “Perkins I”).

Charles E. Perkins, *Mobile Networking Through Mobile IP*, IEEE Internet Computing, V. 2, No. 1, XP-000764776, pp. 58-69, Jan-Feb., 1998 (*hereinafter* “Perkins II”).

Jason P. Jue, *Design and Analysis of a Replicated Server Architecture for Supporting IP Host Mobility*, Mobile Computing and Communications Review, V. 2, No. 3, XP-000768934, pp. 16-23, July 01, 1998, .

Claims 1, 7-9, 15, and 21-23 stand rejected under 35 U.S.C. § 103(a) as being obvious based on the collective teachings of Ton and Perkins I.

Claims 2, 3, 10, 11, 16 and 17 stand rejected under 35 U.S.C. § 103(a) as being obvious based on the collective teachings of Ton, Perkins I, and Troxel.

Claims 4 and 12 stand rejected under 35 U.S.C. § 103(a) as being obvious based on the collective teachings of Ton, Perkins I, Troxel, Jue, and Tiedemann, Jr.

Claims 5, 6, 13 and 14 stand rejected under 35 U.S.C. § 103(a) as being obvious based on the collective teachings of Ton, Perkins I, Troxel, Perkins II, and Fehnel.

Claim 18 stands rejected under 35 U.S.C. § 103(a) as being obvious based on the collective teachings of Ton, Perkins I, Troxel, and Jue.

Claims 19 and 20 stand rejected under 35 U.S.C. § 103(a) as being obvious based on the collective teachings of Ton, Perkins I, Troxel, and Perkins II.

#### ISSUE

With respect to the obviousness rejection of claims 1, 7-9, 15, and 21-23 based upon the collective teachings of Ton and Perkins I, Appellants focus on claim 1. (Br. 16-18). Thus, we select claim 1 as representative of the group. Appellants' arguments (Br. 18), raise the following issue:

Did Appellants demonstrate that the Examiner erred in finding that Ton and Perkins I collectively teach the claimed steps of “storing addresses for a plurality of home agents in the subscriber unit,” “failing to achieve registration,” and “attempting registration with the secondary home agent,” as required by claim 1?

#### FINDINGS OF FACT (FF)

1. In one embodiment, a redundancy embodiment, after a Mobile Node (MN) registers with a primary home agent (HA) stored in the MN, Ton's network sends a list comprising a list of alternate HAs to the MN for storage therein (§§ 0036, 0054, 0059-0065). When the MN attempts to re-

register on the primary HA, if that re-registration fails, the MN attempts to register using one of the alternate stored HAs. (Ton, ¶¶ 0063-0065).

2. In another embodiment, a load balancing embodiment, an alternate HA is sent to the MN from the network after an attempted registration with the stored primary HA indicates another HA, HA2, has a lesser load. If so, another HA2's IP address is sent to the MN and stored, and HA2 becomes the primary HA (Ton, ¶¶ 0040-0053).

3. Perkins I discloses that a mobile node may be configured with one or more home agent addresses. (§ 3.6).

## PRINCIPLES OF LAW

Appellants have the burden on appeal to the Board to demonstrate error in the Examiner's position. *See In re Kahn*, 441 F.3d 977, 985-86 (Fed. Cir. 2006) ("On appeal to the Board, an applicant can overcome a rejection [under § 103] by showing insufficient evidence of *prima facie* obviousness or by rebutting the *prima facie* case with evidence of secondary indicia of nonobviousness.") (quoting *In re Rouffet*, 149 F.3d 1350, 1355 (Fed. Cir. 1998)).

Under § 103, a holding of obviousness can be based on a showing that "there was an apparent reason to combine the known elements in the fashion claimed. . . ." *KSR Int'l v. Teleflex, Inc.*, 127 S. Ct. 1727, 1740-41 (2007). Such a showing requires:

"some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." . . . [H]owever,

the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.

*Id.*, 127 S. Ct. at 1741 (*quoting Kahn*, 441 F.3d at 988).

If the Examiner's makes such a showing, the burden then shifts to the Appellants to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. *See In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992).

## ANALYSIS

Appellants' argument that Ton only allows redundancy activity once the subscriber unit is registered and not upon an *initial* inability to register with the network, and Appellants' further remarks regarding their disclosed embodiments (Br. 16-18) (emphasis supplied), are not commensurate with the scope of claim 1 because no such *initial* registration inability is recited. We find that under Ton's redundancy embodiment, a primary and a plurality of HA addresses are stored in the MN (i.e., subscriber unit) after a successful registration, meeting the first step of the claim. (FF 1). Thereafter, the MN attempts another registration with a primary HA and when that fails, the MN attempts another registration with a selected secondary HA from a plurality (*see* FF 1), thereby meeting the remaining steps except for the load balancing function set forth in the selecting step of the claim.

On the other hand, the Examiner generally found, without challenge by Appellants, that Ton's load balancing embodiment provides every step of

the claim except for, according to the Examiner's characterization, "storing the address prior to the first attempt of registration."<sup>2</sup> (Ans. 6).<sup>3</sup> Aside from the Examiner's implied claim interpretation, *see* n. 2, we generally concur with these unchallenged findings (FF 2). The Examiner also found, and we concur, that Perkins I teaches such prior storage of multiple HA addresses. (Ans. 6, FF 3).

With respect to the combination involving Perkins I, Appellants' argument boils down to an unsupported assertion that the MN of Perkins I can never fail to register with the primary HA as required by claim 1 (Br. 18). This argument does not address the Examiner's findings. The Examiner found that Ton's home agent fails to achieve registration as the claim requires. (Ans. 5-6). We concur with the Examiner's finding. (FF 1, 2). We also find that common sense, in light of Ton's redundancy teaching (FF 1), implies that storage of the additional secondary HAs in the MN of Perkins I occurs in case the primary HA is unavailable for one reason or another, thereby implying a registration failure, contrary to Appellants' argument.

Accordingly, Appellants' final argument, which amounts to a conclusion based upon the above two unpersuasive arguments addressed above, are unpersuasive; i.e., the conclusion that the combination lacks a suggestion or motivation to achieve the claimed steps of "storing addresses for a plurality of home agents in the subscriber unit," "failing to achieve

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<sup>2</sup> We determine that the claim does not require the storage step to occur before the first "attempting registration" step. Even if it did, the combination would still meet the claim as indicated further below.

<sup>3</sup> Examiner's Answer (mailed, November 29, 2007).



registration,” and subsequently, “attempting registration with a secondary home agent” (Br. 18). Such mere claim recitations and assertions, absent any supporting argument, fail to demonstrate error in the Examiner’s position. *See* 37 C.F.R. § 41.37(c) (1) (vii). In any case, we find that the combination of Ton with Perkins I meets the claim steps for the reasons outlined above, and as further explained below.

Appellants do not challenge the Examiner’s finding that Ton teaches storage of a primary HA and plural secondary HAs (*see* Ans. 5, citing Ton, ¶¶ 0060-0062). As indicated above, we generally concur with the Examiner’s finding to the extent that Ton’s redundancy embodiment teaches such storage (FF 1).

As the Examiner further found, Perkins I teaches a similar storage of a primary HA and a plurality of secondary HAs (*see* Ans. 6, FF 3). The Examiner also provided “an apparent reason to combine the known elements in the fashion claimed. . .” *KSR*, 127 S. Ct. at 1740-41; that is, the Examiner stated that Perkins I’s storage of multiple HAs in Ton’s system would have rendered a more efficient registration system. Appellants’ unsupported assertions fail to address the Examiner’s findings and fail to convince us of error.

We find that modifying Ton’s redundancy system to include Ton’s load balancing function amounts to combining prior art elements according to their established functions to yield a predictable benefit of load balancing. Alternatively, we also find that modifying Ton’s load balancing system to include Ton’s MN storage/redundancy system and/or Perkins I’s MN storage system amounts to combining prior art elements according to their

established functions to yield a predictable efficiency and redundancy benefit.

Accordingly, we will sustain the Examiner's rejection of claim 1 and dependent claims 7-9, 15 and 21-23, not argued separately. With respect to the remaining rejections of claims 2-6, 10-14, and 16-20, Appellants provide no patentability arguments directed to the additional references of Troxel for claims 2, 3, 10, 11, 16 and 17; Jue and Tiedmann for claims 4 and 12; Troxel, Perkins II, and Fehnel for claims 5, 6, 13 and 14; Troxel and Perkins II for claims 19 and 20; and Troxel and Jue for claim 18. Rather, Appellants essentially incorporate their arguments directed to claim 1 and apply them to the remaining rejections (Br. 19-26). Accordingly, for the reasons discussed above, we also sustain the rejections of claims 2-6, 10-14, and 16-20.

### CONCLUSION

Appellants did not demonstrate that the Examiner erred in finding that Ton and Perkins I collectively teach the claimed steps of "storing addresses for a plurality of home agents in the subscriber unit," "failing to achieve registration," and "attempting registration with a secondary home agent," as required by claim 1.

### DECISION

We affirm the Examiner's decision rejecting claims 1-23.

Appeal 2008-4781  
Application 09/981,268

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

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